

**IN THE CLAIMS**

*Kindly amend the claims as shown in the following listing of all claims:*

1. (canceled)

2. (currently amended) A prosthetic ankle joint device according to ~~claim 1~~ claim 4, wherein the first and third (5, 7) and the second and fourth (6, 8) articular bearing surfaces are shaped complementarily and mutually to allow the non-fixed axis of rotation of the articulation to be reproduced based on the typical isometric rotation kinematics of some ligament fibers (9, 10) of the natural joint in the unloaded state, therefore optimally designed from the subject-specific geometry of said ligament fibers (9, 10).

3. (currently amended) A prosthetic ankle joint device as set forth in ~~claim 1~~ claim 4, wherein the first component (2) has a generally convex first articular bearing surface (5); the second component (3) has an articular bearing second surface (6) that is generally convex in a sagittal plane and partly concave in a frontal plane; and the third component (4) has two articular third and fourth bearing surfaces (7, 8) with front-to-back disposition and with individual shapes that are substantially complementary to said first and second articular surfaces (5, 6) of the first (2) and of the second (3) component, said third component (4) being situated between said first and second component (2, 3) with the said complementary first and third (5, 7) surfaces and said complementary fourth and second (8, 6) surfaces coupled in the said freely sliding and individually unconstrained manner.

4. (currently amended) A prosthetic ankle joint device as claimed in claim 1, A prosthetic ankle joint device for articulating segments comprising:

a first component (2) having a first articular bearing surface (5), the first component (2) adapted to engage a first tibial bone segment (11);

a second component (3) having a second articular bearing surface (6) opposite to the first bearing surface (5) of the first component (2), the second component (3) adapted to engage a second tarsal bone segment (20); and

a third component (4) interposed to the first (2) and the second component (3), having two articular third and fourth bearing surfaces (7, 8) whose individual forms are substantially complementary to said first and second articular surfaces (5, 6) of the first (2) and of the second (3) components, said third and fourth articular bearing surfaces (7, 8) being freely slideable, both in a sagittal plane and a frontal plane transverse to the sagittal plane, and individually non-captively engaged;

said first articular bearing surface (5) and said second articular bearing surface (6) being both shaped not reproducing natural corresponding shapes of said articulating segments;

the first and third (5, 7) and the second and fourth (6, 8) articular bearing surfaces being shaped complementarily and mutually to allow a non-fixed axis of rotation of the articulation to be reproduced while maintaining full congruence, wherein the first articular surface of said first component and the third articular surface of said third component complementary thereto are each shaped partly spherically with equal radii of curvature.

5. (currently amended) A prosthetic ankle joint device as claimed in ~~claim 1~~ claim 4, wherein the second articular surface of said second component and the fourth articular surface of said third component complementary thereto are each partly anticlastic surfaces and have equal curvatures.

6. (currently amended) A prosthetic ankle joint device as claimed in ~~claim 1~~ claim 4, wherein said first and second components each present a wholly metallic construction, and said third component is wholly constructed of plastic material.

7. (currently amended) A prosthetic ankle joint device (1) for an articulation with non congruent shape between two articular bone segments (11, 20) having articular surfaces respectively with individually concave and convex curvatures with greater and lesser radii of curvatures, said device (1) comprising a first component (2) having a partially spherical convex first articular bearing surface (5) suitable for being anchored to said first bone segment (11) to replace said concave surface; a second component (3) having a second anticlastic articular bearing surface (6) that is convex in a sagittal plane and partly concave in a frontal plane, [[,]] and suitable for being anchored to said second bone segment (20) to replace said convex surface; and a third component (4) having two articular third and fourth bearing surfaces (7, 8) in front-to-back disposition, the third surface (7) presenting a partially spherical concave shape with curvature equal to the convex first surface (5) of the first component (2), and the fourth surface (8) being a partly anticlastic surface with curvatures equal to the curvatures of the second articular bearing surface (6) of the second component (3); said third component (4) being interposed to the first (2) and the second component (3), having said two articular third and fourth bearing surfaces (7, 8) whose individual forms are

substantially complementary to said first and second articular surfaces (5, 6) of the first (2) and of the second (3) components, said ~~two~~ third and fourth articular bearing surfaces (7, 8) being freely slidably and individually non-captively engaged.

8. (previously presented) A prosthetic ankle joint device as claimed in claim 3 wherein each of said components (2, 3, 4) presents a single-piece construction.

9. (previously presented) A prosthetic ankle joint device for the human ankle articulation for an articulation of incongruent shape between two bone segments (11, 20) having articular surfaces respectively with individually concave and convex curvatures with greater and lesser radii of curvature, said device (1) comprising a tibial component (2) able to be anchored to the tibia (11) and defining a partially spherical convex first articular bearing surface (5); a talar component (3) able to be anchored to the talus (20) and defining a partly anticlastic second articular bearing surface (6); and a meniscal component (4) defining two articular third and fourth bearing surfaces (7, 8) in front-to-back disposition, the third surface (7) presenting a partially spherical concave shape with curvature equal to the convex first surface (5) of the first component (2), and the fourth surface (8) being a second partly anticlastic surface with curvatures equaling those of said talar component (3); said meniscal component (4) being situated and maintained between the tibial (2) and talar (3) components, having said two articular third and fourth bearing surfaces (7, 8) whose individual forms are substantially complementary to said first and second articular surfaces (5, 6) of the tibial (2) and of the talar (3) components, said third and fourth articular bearing surfaces (7, 8) being freely slidably and individually non-captively engaged.

10. (canceled)
11. (canceled)
12. (canceled)
13. (canceled)
14. (canceled)
15. (canceled)
16. (canceled)

17. (currently amended) A prosthetic ankle joint device as claimed in claim 3, A prosthetic ankle joint device for articulating segments comprising:

a first component (2) having a first articular bearing surface (5), the first component (2) adapted to engage a first tibial bone segment (11);

a second component (3) having a second articular bearing surface (6) opposite to the first bearing surface (5) of the first component (2), the second component (3) adapted to engage a second tarsal bone segment (20); and

a third component (4) interposed to the first (2) and the second component (3), having two articular third and fourth bearing surfaces (7, 8) whose individual forms are substantially complementary to said first and second articular surfaces (5, 6) of the first (2) and of the second (3) components, said third and fourth articular bearing surfaces (7, 8) being freely slidable, both in a sagittal plane and a frontal plane transverse to the sagittal plane, and individually non-captively engaged;

said first articular bearing surface (5) and said second articular bearing surface (6) being both shaped not reproducing natural corresponding shapes of said articulating segments;

the first and third (5, 7) and the second and fourth (6, 8) articular bearing surfaces being shaped complementarily and

mutually to allow a non-fixed axis of rotation of the articulation to be reproduced while maintaining full congruence wherein:

the first component (2) has a generally convex first articular bearing surface (5); the second component (3) has an articular bearing second surface (6) that is generally convex in a sagittal plane and partly concave in a frontal plane; and the third component (4) has two articular third and fourth bearing surfaces (7, 8) with front-to-back disposition and with individual shapes that are substantially complementary to said first and second articular surfaces (5, 6) of the first (2) and of the second (3) component, said third component (4) being situated between said first and second component (2, 3) with said complementary first and third (5, 7) surfaces and said complementary fourth and second (8, 6) surfaces coupled in the said freely sliding and individually unconstrained manner; and

wherein the first articular surface of said first component and the third articular surface of said third component complementary thereto are each shaped partly spherically with equal radii of curvature.

18. (previously presented) A prosthetic ankle joint device as claimed in claim 3, wherein the second articular surface of said second component and the fourth articular surface of said third component complementary thereto are each partly anticlastic surfaces and have equal curvatures.

19. (previously presented) A prosthetic ankle joint device as claimed in claim 3, wherein said first and second components each present a wholly metallic construction, and said third component is wholly constructed of plastic material.

20. (canceled)